

Work Order ID 149462

Friday, July 22, 2016 2:43:31 PM

149462

AMOD
DGI

Page 1

Item ID: D412-630-034DG Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green
 Start Date: 9/30/2016 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 10/31/2016 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: Dem Date: 16/07/25 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN D412-630	Rev O								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & create labels per PPP D412-630-034 CHG005								
110	Small Fab	0.00							
110	Small Fab								
Small Fab	Memo	0.23							
	Assemble as per dwg D412-630 p.14								
	Coat all hardware with LPS3 rust inhibitor								
	A/R LPS3 batch: <u>123772</u>								
	COAT exposed HARDWARE WITH LPS PROCYON .								
	A/R LPS PROCYON BATCH: <u>133690</u>								

DAS 6 9-89 OCT 07 2016
 DAS 21 9-89 16-10-11
 4 DAS 27 9-89
 OCT 20 2016
 4X 16/10/18 DAS 36 9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 149462

Friday, July 22, 2016 2:43:31 PM

149462

Page 3

Item ID: D412-630-034DG Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green
Start Date: 9/30/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 10/31/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							
150	Packaging					<u>4X</u>	DAS 28 9-89	DAS 27 9-89	OCT 20 2016
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-630-034								
	Location: <u>Sold</u>								
	PPP Rev: _____					DAS 21 9-89			
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.07							OCT 20 2016
Quality Control									
						DAS 21 9-89			OCT 20 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Friday, July 22, 2016 2:43:31 PM

149462

D412-630-034DG

Required Qty: 4.00

Comments: IPP Rev:A New Issue 06-11-08 JLM
 IPP rev B ecn1019, added D2807-041 EC verified by:DD
 IPP rev :C 11.01.06 added route seq ID DD vef:EC IPP REV:D
 13.06.07 PER CHG004 DD vef:JLM IPP REV:E 16.06.23 AS
 PER IIN REV.O DD VEF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN310C8		Purchased	No			110	Each	24.0000	2	8			
										**	135724	OCT 11 2016	DAS 1
AN310C8													9-
Nut													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST331				24					
					m132677			4					
					m135297			20					
AN3C21A		Purchased	No			110	Each	21.0000	1	4			
										**	135724B	OCT 11 2016	DAS 6
AN3C21A													9-89
Bolt													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST348				21					
					M133686			21					
AN8C16		Purchased	No			110	Each	39.0000	2	8			
										**	135722	OCT 11 2016	DAS 6
AN8C16													9-89
Bolt													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				over005				21					
					M133920			7					
					M133921			7					
					M134131			7					
				ST332				18					
					M132674			4					
					M133091			7					
					M133336			7					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 2

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

D2012-107

Manufactured No

110

Each

10.0000

1

D2012-107

Clevis

**

149315

OCT 11 2016
DAS 6
9-89

Location

Loc Qty

Loc Code

WA004

10

145274

10

D2803-042

Manufactured No

110

Each

0.0000

1

D2803-042 DG

Bracket Assembly

D2804-042

Manufactured No

110

Each

0.0000

1

D2804-042 DG

RH Step Fwd Bracket

D2807-041

Manufactured No

110

Each

3.0000

2

D2807-041

Prop Assembly

**

149206

OCT 12 2016
DAS 6
9-89

Location

Loc Qty

Loc Code

FG

2

89606

2

ST010

1

142559

1

D2813

Manufactured No

110

Each

18.0000

2

D2813

Washer

**

149366

OCT 11 2016
DAS 6
9-89

Location

Loc Qty

Loc Code

ST011

18

146527

18

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 3

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

D3395-1 Manufactured No 110 Each 62.0000 4 16

D3395-1

Bushing

**

149462

OCT 11 2016
DAS
6
9-89

Location

Loc Qty

Loc Code

ST034

62

142347

62

D3562-042

Manufactured No

110 Each

1.0000

1

4

D3562-042 DG

Step Weldment

**

16/10/18

DAS
36
9-89

OCT 11 2016
DAS
6
9-89

Location

Loc Qty

Loc Code

FG039

1

142348

1

MS21043-3

Purchased No

110 Each

920.0000

4

16

MS21043-3

Nut

**

1357/42

OCT 11 2016
DAS
6
9-89

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

11

m130673

11

GA

237

m133990

237

OVER007

400

m135058

400

ST302

86

m134861

86

ST304

106

m131340

106

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	OTHER : _____							
Misidentified	☐	Past Due								

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 4

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

MS24665-302

Purchased

No

110

Each

32.0000

2

8

MS24665-302

Cotter Pin

**

135678

DAS
6
9-89

OCT 11 2016

Location

Loc Qty

Loc Code

GA

15

120521

15

ST288

17

m134738

17

MS24693-C280

Purchased

No

110

Each

11.0000

2

8

MS24693-C280

SCREW

**

135672

DAS
6
9-89

OCT 11 2016

Location

Loc Qty

Loc Code

ST287

11

m131624

11

MS24693-C285

Purchased

No

110

Each

28.0000

1

4

MS24693-C285

Screw

**

OCT 11 2016

Location

Loc Qty

Loc Code

ST287

28

m134558

28

AN44C7A

Purchased

No

130

Each

11.0000

1

4

AN44C7A

Eyebolt

**

135704

DAS
28
9-89

Location

Loc Qty

Loc Code

ST339

11

m134502

2

m135127

9

DAS
27
9-89

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 5

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

AN4C10A

Purchased

No

130

Each

7.0000

1

4

AN4C10A

BOLT

**

135390 x1

OCT 11 2016

DAS 6 28
9-89 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST345

7

M134497

7

AN4C15A

Purchased

No

130

Each

146.0000

2

8

AN4C15A

Bolt

**

OCT 11 2016

DAS 28
9-89 9-89
DAS 6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

10

120360

10

OVER002

50

M132763

20

M133485

30

ST343

86

M130716

40

M131377

24

M132189

8

M132823

14

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition				
					Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 6

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

AN4C6A Purchased No 130 Each 389.0000 1 4

AN4C6A

Bolt

**

135470

OCT 11 2016

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FG	14	
103344	4	
121657	10	
OVER002	50	
m135297	50	
ST345	325	
m134861	75	
m134955	150	
m135127	100	

AN5C15A Purchased No 130 Each 23.0000 2 8

AN5C15A

Bolt

**

135442

OCT 11 2016

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
over003	20	
M135058	20	
ST337	3	
M130466	3	

D2806-1 Manufactured No 130 Each 3.0000 2 8

D2806-1

Bushing

**

149371

OCT 11 2016

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
ST010	3	
142466	3	

D2806-3 Manufactured No 130 Each 0.0000 2 8

D2806-3

Bushing

**

149456

OCT 11 2016

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 7

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

D2810-5

Manufactured No

130

Each

6.0000

1

4

D2810-5

Strut

**

3x B149358
1x B149357

OCT 20 2016

DAS

28

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST377

6

134899

1

142838

5

D3396-1

Manufactured No

130

Each

6.0000

2

8

D3396-1

Spacer

**

149446

DAS

6

9-89

OCT 11 2016

DAS

28

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST034

6

142351

6

D3672-15

Manufactured No

130

Each

231.0000

5

20

D3672-15

Phenolic Washer

**

149430

DAS

6

9-89

OCT 11 2016

DAS

28

9-89

small 6b

Location

Loc Qty

Loc Code

ST050

231

148073

231

D3672-17

Manufactured No

130

Each

358.0000

7

28

D3672-17

Phenolic Washer

**

28

DAS

6

9-89

OCT 11 2016

DAS

28

9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST050

358

148074

358

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 8

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

D3672-19 Manufactured No 130 Each 416.0000 4 16

D3672-19

Phenolic Washer

small fab

**

OCT 11 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

ST050

416

148075

416

16

D3672-5 Manufactured No 130 Each 622.0000 7 28

D3672-5

Washer, Phenolic

pkg

**

OCT 11 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

FG

8

44679

8

ST049

234

35521

234

28

ST051A

380

50354

380

D3672-7 Manufactured No 130 Each 803.0000 4 16

D3672-7

Washer, Phenolic

small fab

**

144431

DAS
6
9-89

OCT 11 2016

Location

Loc Qty

Loc Code

FG

40

129987

25

133986

15

ST049

263

142572

263

ST051A

500

147220

500

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 8

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER :			

Picklist Print

Friday, July 22, 2016 2:43:31 PM

Page 9

Work Order ID: 149462

149462

Parent Item: D412-630-034DG

D412-630-034DG

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear, Drab Green

Start Date: 9/30/2016

Required Date: 10/31/2016

Start Qty: 4.00

Required Qty: 4.00

MS21043-4

Purchased

No

130

Each

753.0000

4

16

MS21043-4

Nut

**

135407

OCT 11 2016

DAS 28
6 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

FG

40

104603

40

GA

17

m132803

17

OVER007

300

m134754

300

ST302

396

m134502

96

m134943

300

MS21043-5

Purchased

No

130

Each

162.0000

3

12

MS21043-5

Nut

**

135704

OCT 11 2016

DAS 28
6 9-89

DAS 27
9-89

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST302

66

m135157

66

Friday, July 22, 2016 2:43:31 PM

Shop Packet Print

Page 9

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Qty -033	Qty -034	Qty -243	Qty -244	Part Number	Description
X				D412-630-033	HELI-ACCESS-STEP™ LH (FOLDING)
	X			D412-630-034	HELI-ACCESS-STEP™ RH (FOLDING)
1		X		D412-630-243	STEP ASSEMBLY LH
	1		X	D412-630-244	STEP ASSEMBLY RH
		1	1	D2012-107	CLEVIS
		1		D2803-041	STA 84 BRACKET ASSEMBLY LH
			1	D2803-042	STA 84 BRACKET ASSEMBLY RH
		1		D2804-041	STA 155 BRACKET ASSEMBLY LH
			1	D2804-042	STA 155 BRACKET ASSEMBLY RH
2	2			D2806-1	BUSHING
2	2			D2806-3	BUSHING
		2	2	D2807-041	GAS SPRING ASSEMBLY (WAS D2807)
1	1			D2810-5	STRUT
		2	2	D2813	WASHER
		1		D3562-041	STEP WELDMENT LH
			1	D3562-042	STEP WELDMENT RH
		4	4	D3395-1	BUSHING
2	2			D3396-1	SPACER
7	7			D3672-5	WASHER (OR NAS1515H5)
		4	4	D3672-7	WASHER (OR NAS1515H5L)
		5	5	D3672-15	WASHER (OR NAS1515H3)
7	7			D3672-17	WASHER (OR NAS1515H4)
		4	4	D3672-19	WASHER (OR NAS1515H8)
		1	1	AN3C21A	BOLT
1	1			AN4C6A	BOLT
1	1			AN4C10A	BOLT
2	2			AN4C15A	BOLT
1	1			AN44-C7A	EYEBOLT
2	2			AN5C15A	BOLT
		2	2	AN8C16	BOLT
		2	2	AN310C8	NUT
		2	2	MS24665-302	COTTER PIN (OR AN380C3-4)
		4	4	MS21043-3	NUT
4	4			MS21043-4	NUT
3	3			MS21043-5	NUT
		2	2	MS24693-C280	SCREW (OR MS24694-C65)
		1	1	MS24693-C285	SCREW (OR MS24694-C76)